

**Notice of Allowability**

Application No.

10/600,850

Examiner

Hai C. Pham

Applicant(s)

ODA ET AL.

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 08/24/06.
2. ☒ The allowed claim(s) is/are 1,3-6,8-13,15-18 and 20-22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance: Claim 1 is patentable over the prior art of record because of the specific method for focus adjustment for an optical writing unit extending from a first end to a second end transversely across a surface of an image-carrying member, the focus adjustment method comprising a pattern image forming process utilizing said optical writing unit to form a test pattern by projecting light modulated by image data of the test pattern from an array of multiple light-emitting elements corresponding to pixels arranged along the main scanning direction over an image forming area onto said surface of said image-carrying member, converting an electrostatic latent image formed on said surface of said image-carrying member into a visible toner image, and transferring said visible toner image from said surface of said image-carrying member onto a printing medium, said test pattern including uninterrupted multiple pattern elements disposed generally all along said image forming area in a main scanning direction, said multiple pattern elements being of gradually varying density levels corresponding to different amounts of adjustment, and adjustment quantity information showing the amount of adjustment corresponding to the density levels of said multiple pattern elements, and a position adjustment process for separately adjusting the position of said ends of said optical writing unit in such a manner that said optical writing unit is positioned at a proper distance from, and parallel to, said surface of said image-carrying member based on density levels of end portions of each of said multiple pattern elements of said test pattern formed on said printing medium and based upon said adjustment quantity

information. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claims 10 and 21 are patentable over the prior art of record because of the specific configuration of the focus adjustment device for an optical writing unit of an image forming apparatus, said focus adjustment device comprising a memory for storing data on a test pattern, the test pattern including multiple uninterrupted pattern elements of gradually varying density levels corresponding to different amounts of adjustment extending all along a main scanning direction in an image forming area, and adjustment quantity information denoting the amount of adjustment corresponding to the density levels of the pattern elements, an image former including said optical writing unit for performing image forming operation to form the test pattern stored in the memory, and an adjustment mechanism for separately adjusting the position of each end of said optical writing unit relative to a surface of an image-carrying member in a direction of light emitted from multiple light-emitting elements corresponding to pixels arranged along a main scanning direction over said image forming area in such a manner that said optical writing unit is positioned at a proper distance from, and parallel to, said surface of said image-carrying member according to said adjustment quantity information. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claims 3-6, 8-9, 11-13, 15-18, 20 and 22 are allowed because they are dependent from claims 1, 10 and 21 above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on (571) 272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



HAI PHAM  
PRIMARY EXAMINER

September 5, 2006